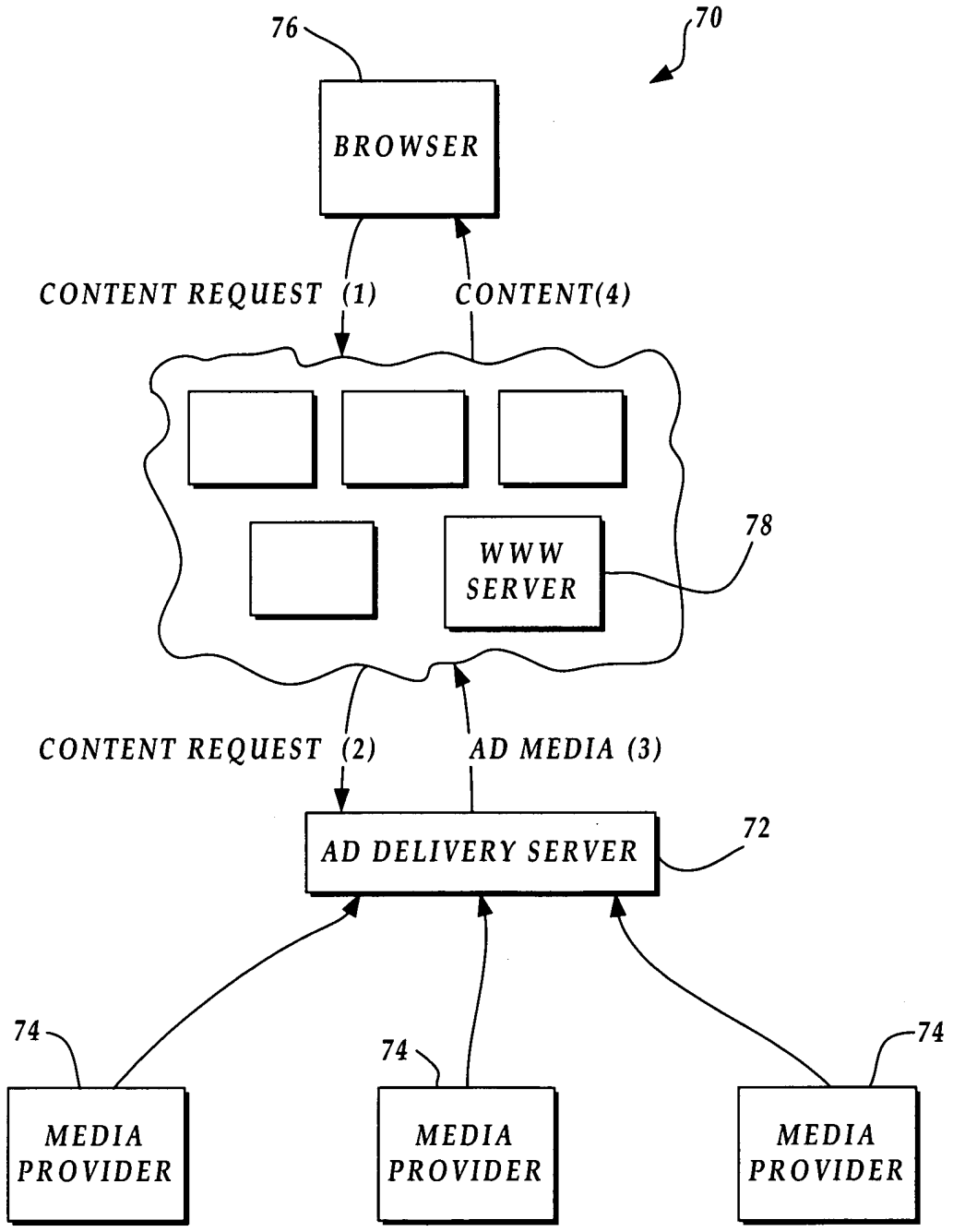
76
70
BROWSER
CONTENT REQUEST (1)
CONTENT(4)
WWW SERVER
78
CONTENT REQUEST (2)
AD MEDIA (3)
AD DELIVERY SERVER
72
74
74
74
MEDIA PROVIDER
MEDIA PROVIDER
MEDIA PROVIDER

Fig.1

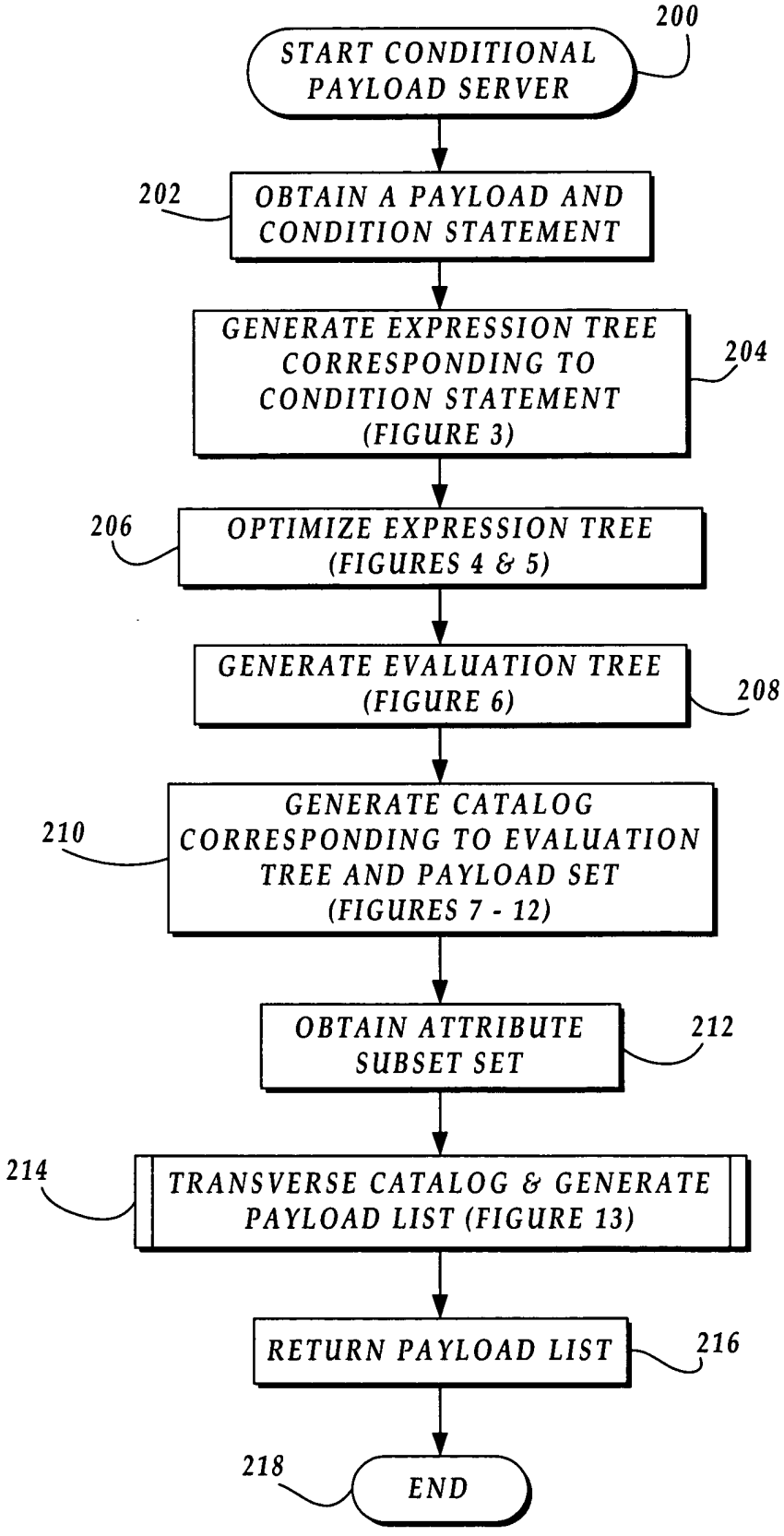
200
START CONDITIONAL PAYLOAD SERVER
202
OBTAIN A PAYLOAD AND CONDITION STATEMENT
GENERATE EXPRESSION TREE CORRESPONDING TO CONDITION STATEMENT (FIGURE 3)
204
206
OPTIMIZE EXPRESSION TREE (FIGURES 4 & 5)
GENERATE EVALUATION TREE (FIGURE 6)
208
210
GENERATE CATALOG CORRESPONDING TO EVALUATION TREE AND PAYLOAD SET (FIGURES 7 - 12)
OBTAIN ATTRIBUTE SUBSET SET
212
214
TRANSVERSE CATALOG & GENERATE PAYLOAD LIST (FIGURE 13)
RETURN PAYLOAD LIST
216
218
END

Fig.2

((STATE=WA OR STATE=CA) AND (OCC=ENGR OR OCC=DR))
AND GENDER=MALE

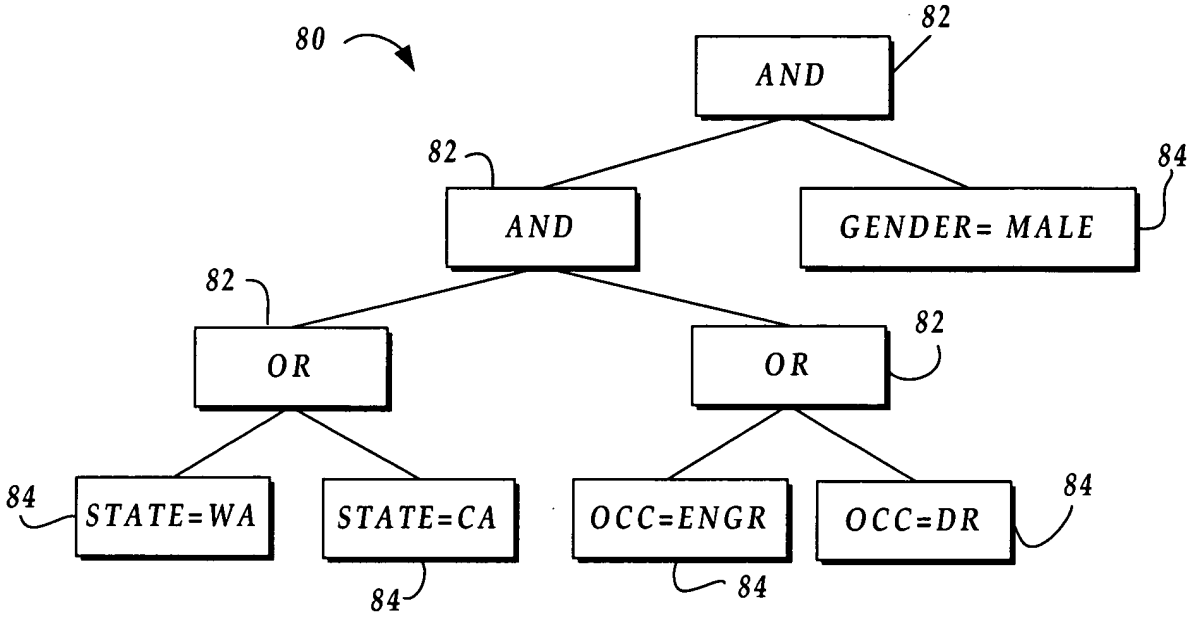

Fig.3

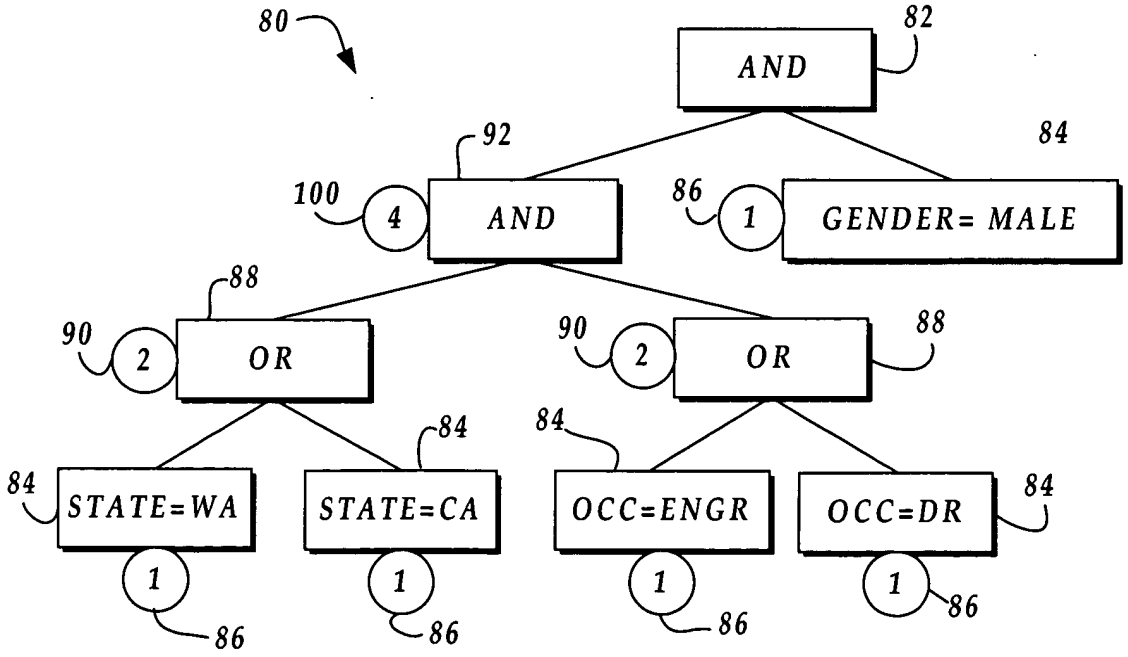

Fig.4

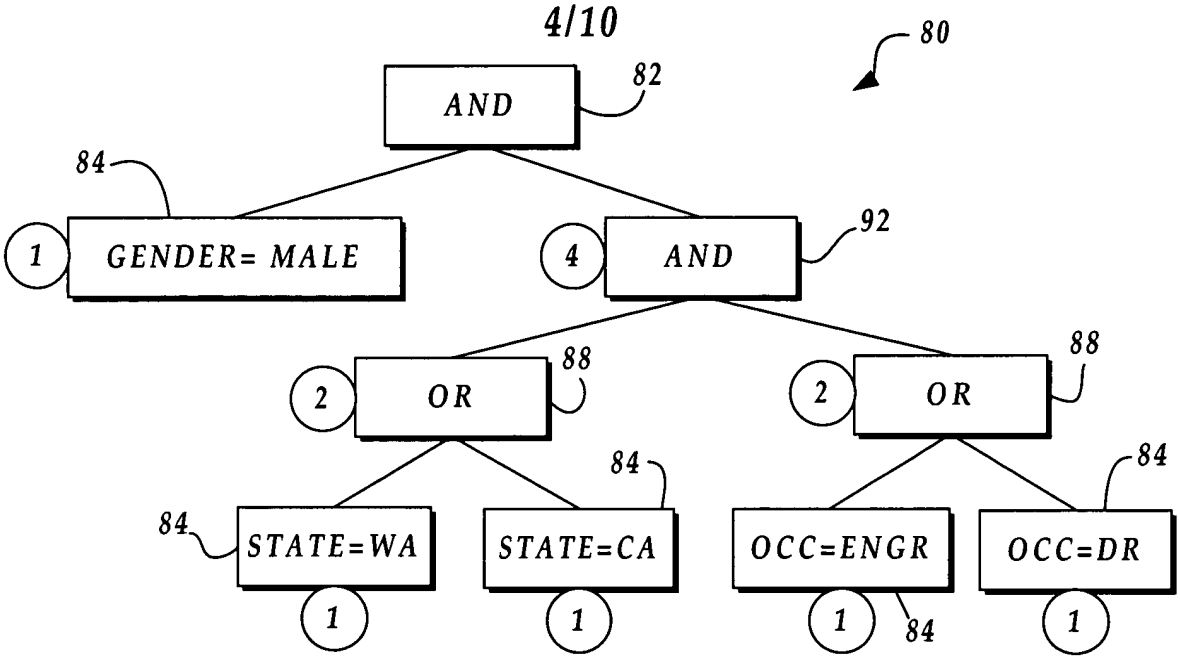
80
AND
82
84
1
GENDER= MALE
4
AND
92
2
OR
88
2
OR
88
84
84
STATE=WA
1
STATE=CA
1
OCC=ENGR
1
84
84
OCC=DR
1

Fig.5

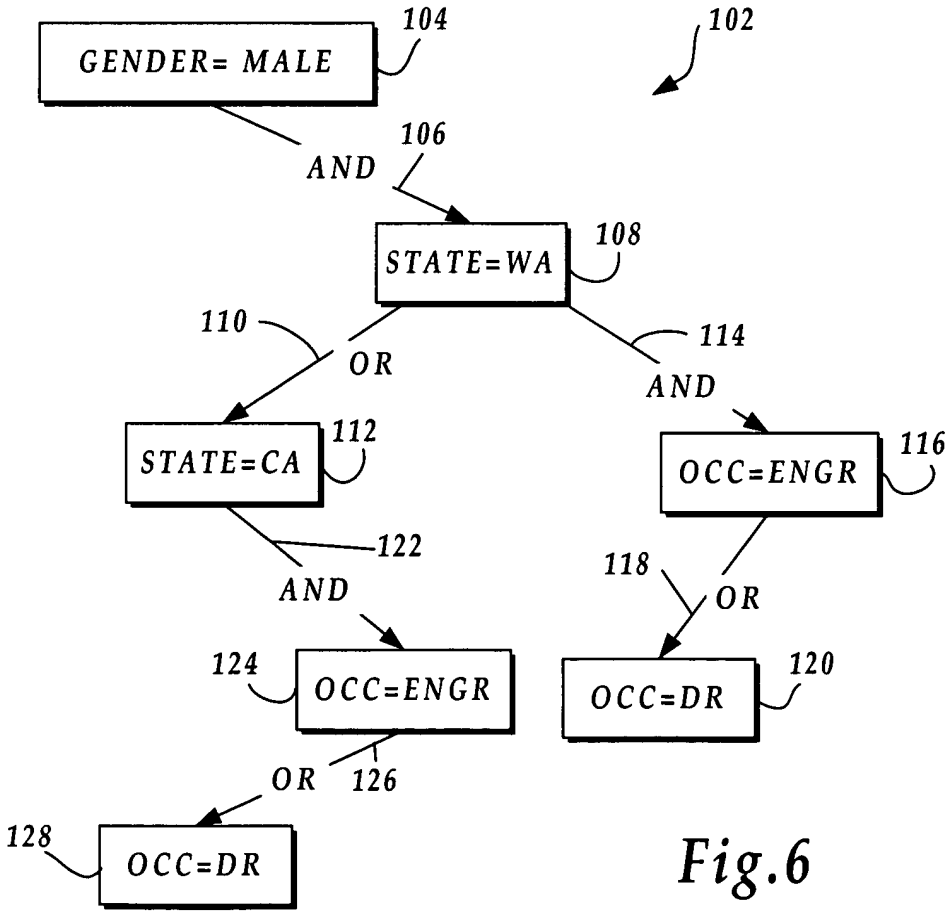
GENDER= MALE
104
102
AND
106
STATE=WA
108
110
OR
114
AND
STATE=CA
112
OCC=ENGR
116
122
AND
118
OR
124
OCC=ENGR
OCC=DR
120
OR
126
128
OCC=DR

Fig.6

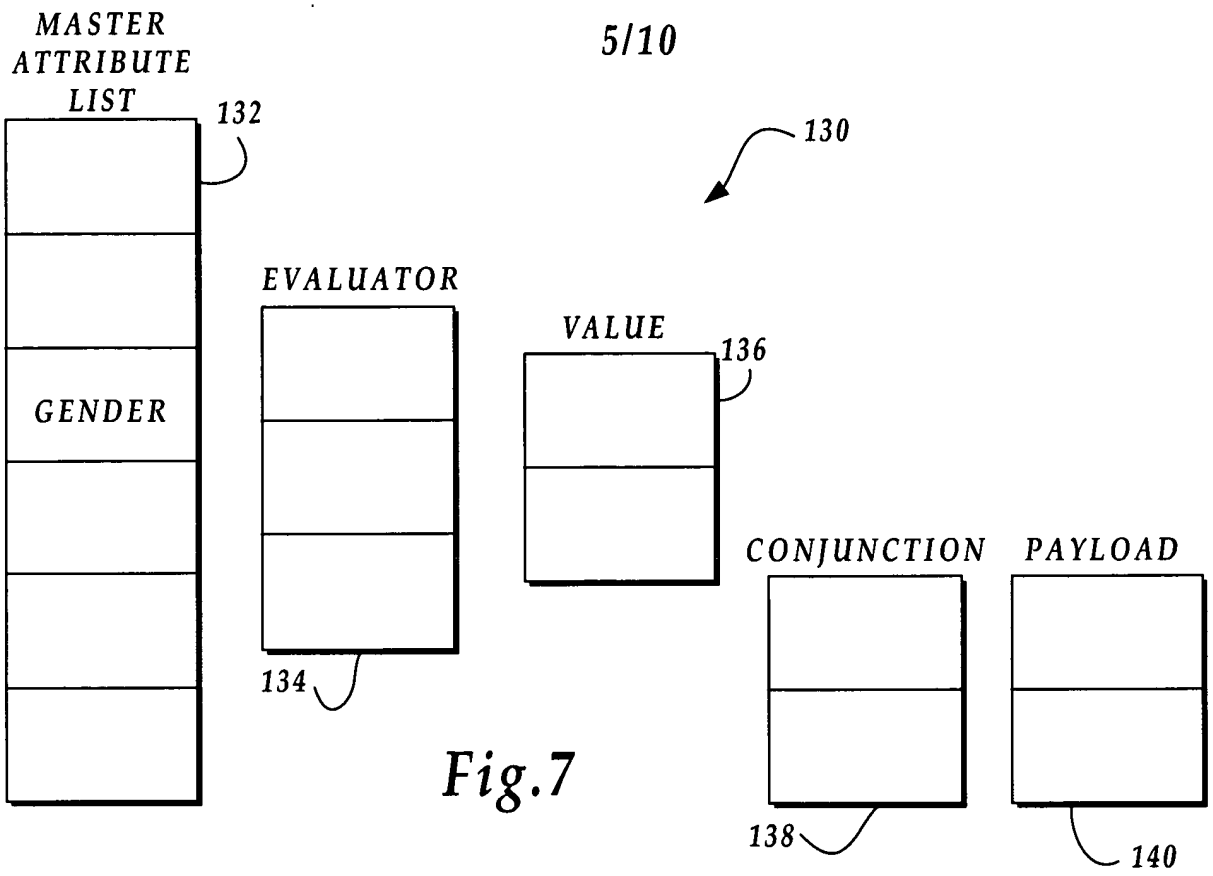

Fig.7

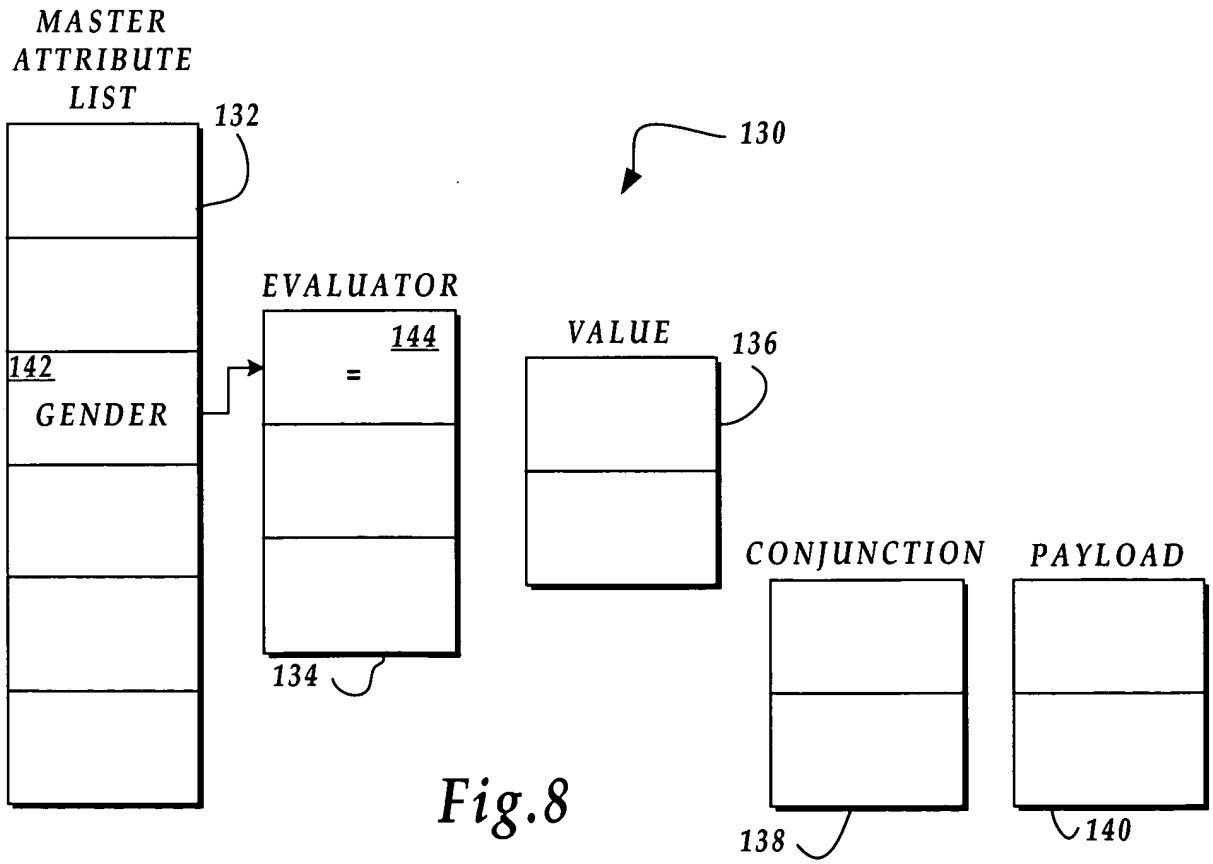

Fig.8

09/26/2005 09:28:00

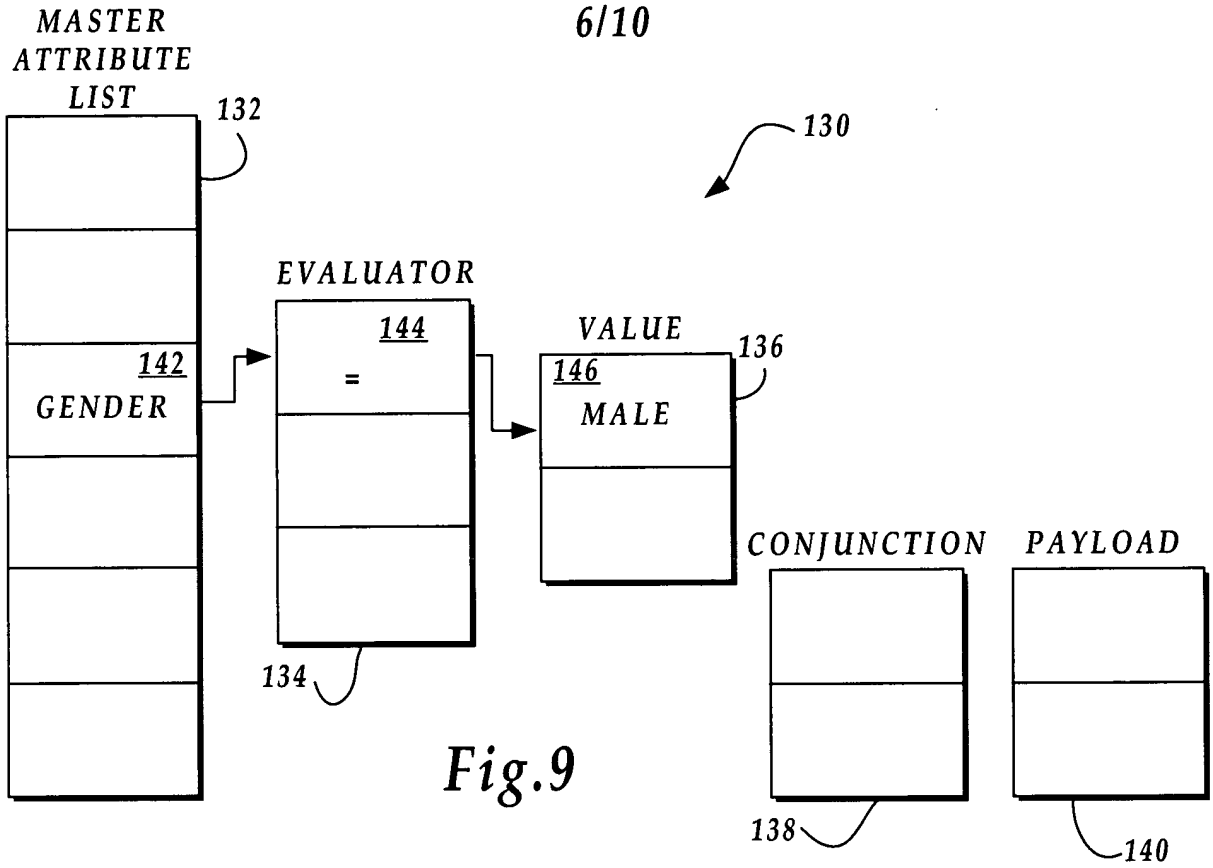
MASTER ATTRIBUTE LIST
132
130
EVALUATOR
144
=
142
GENDER
VALUE
146
MALE
136
CONJUNCTION
PAYLOAD
134
138
140

Fig.9

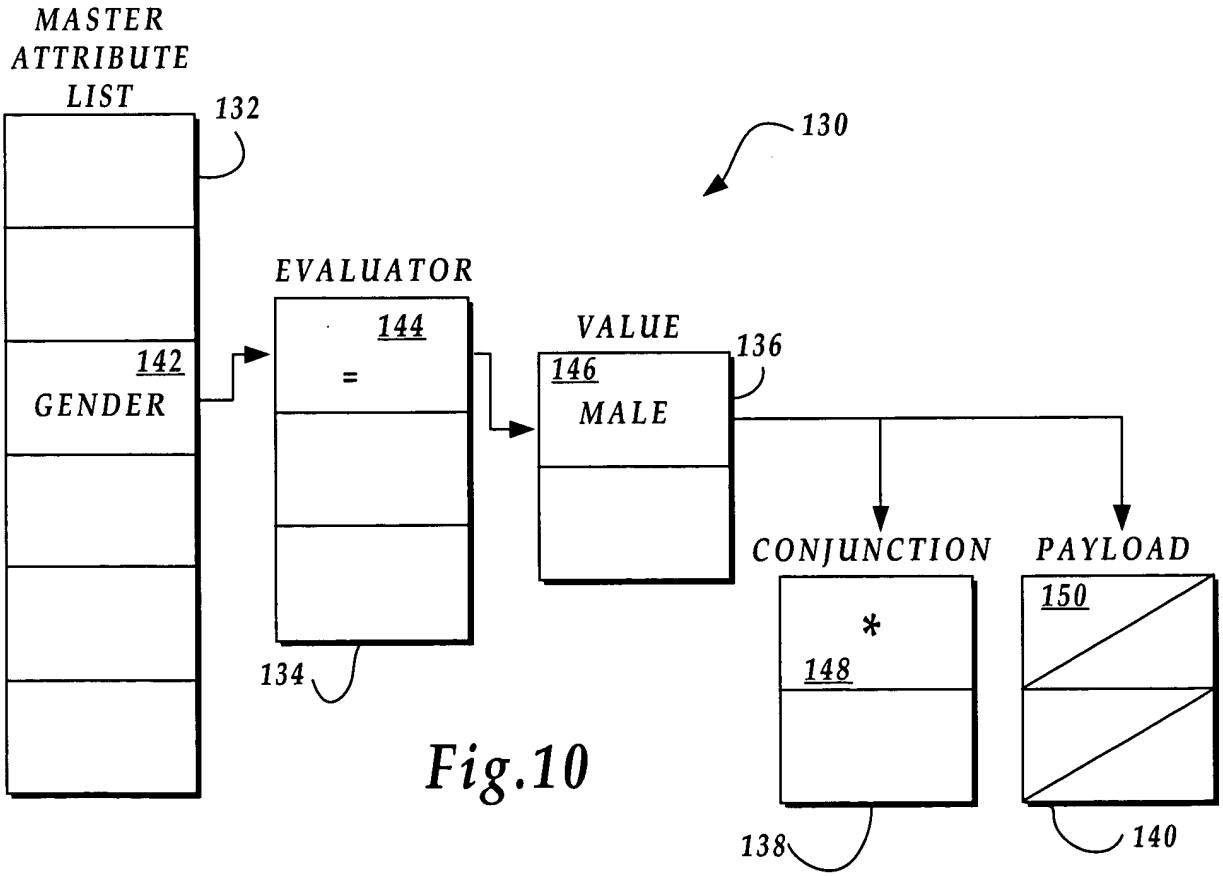
MASTER ATTRIBUTE LIST
132
130
EVALUATOR
144
=
142
GENDER
VALUE
146
MALE
136
CONJUNCTION
*
148
PAYLOAD
150
134
138
140

Fig.10

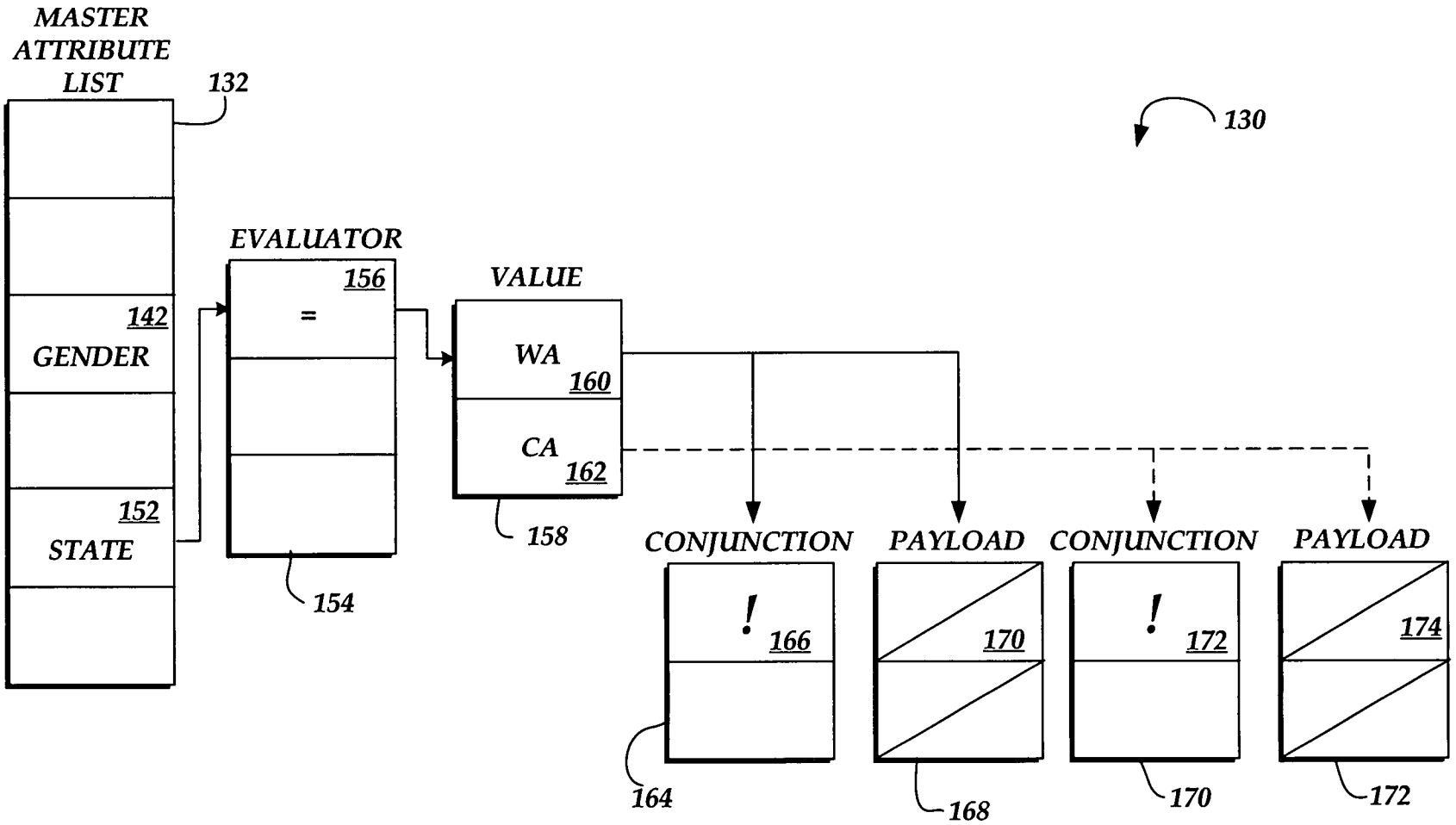
MASTER ATTRIBUTE LIST
132
130
EVALUATOR
156
=
VALUE
142
GENDER
WA
160
CA
162
152
STATE
154
158
CONJUNCTION
PAYLOAD
CONJUNCTION
PAYLOAD
!
166
170
!
172
174
164
168
170
172

Fig.11

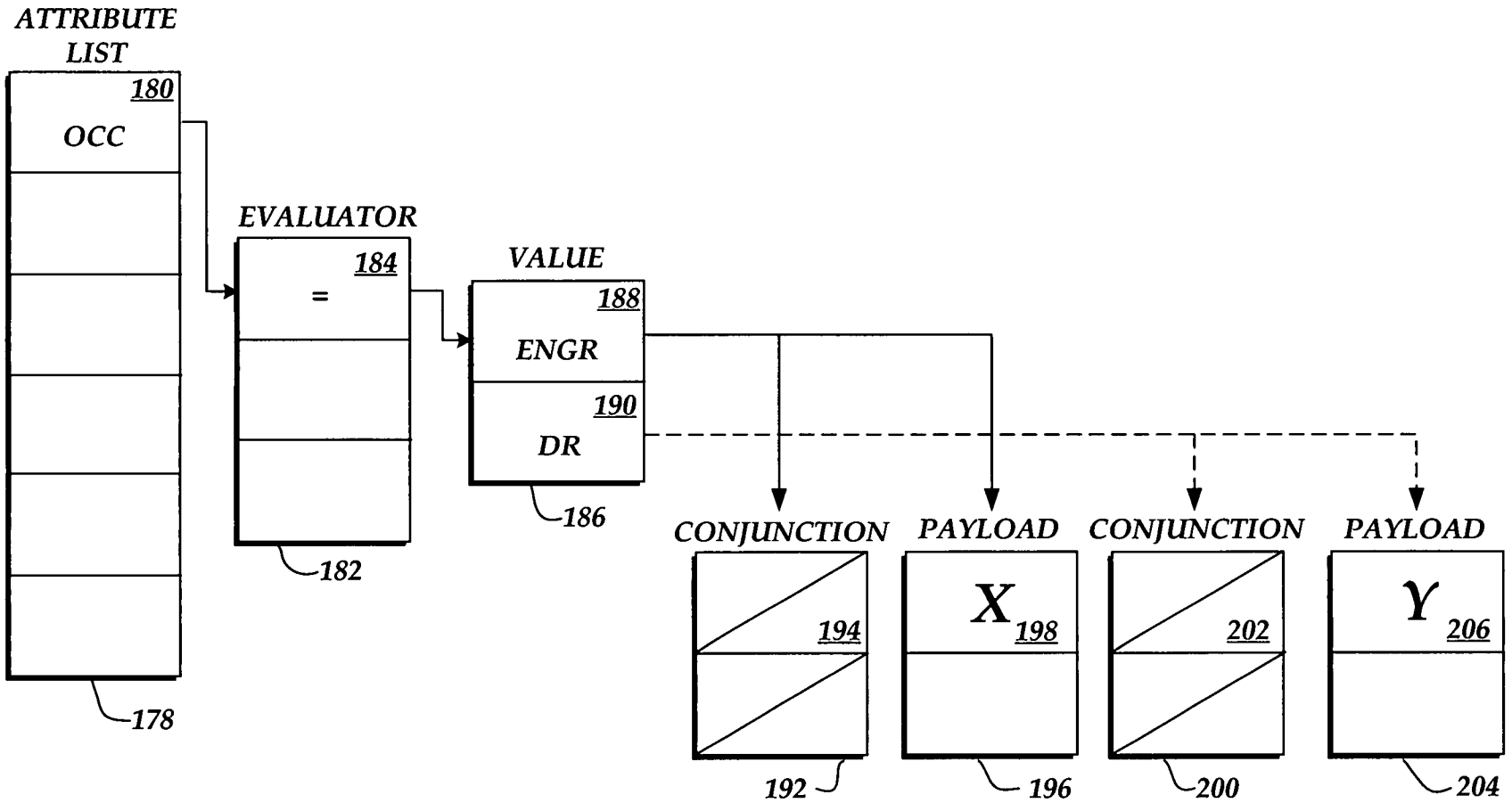
ATTRIBUTE LIST
180
OCC
178
EVALUATOR
184
=
182
VALUE
188
ENGR
190
DR
186
CONJUNCTION
194
192
PAYLOAD
X
198
196
CONJUNCTION
202
200
PAYLOAD
Y
206
204

Fig.12

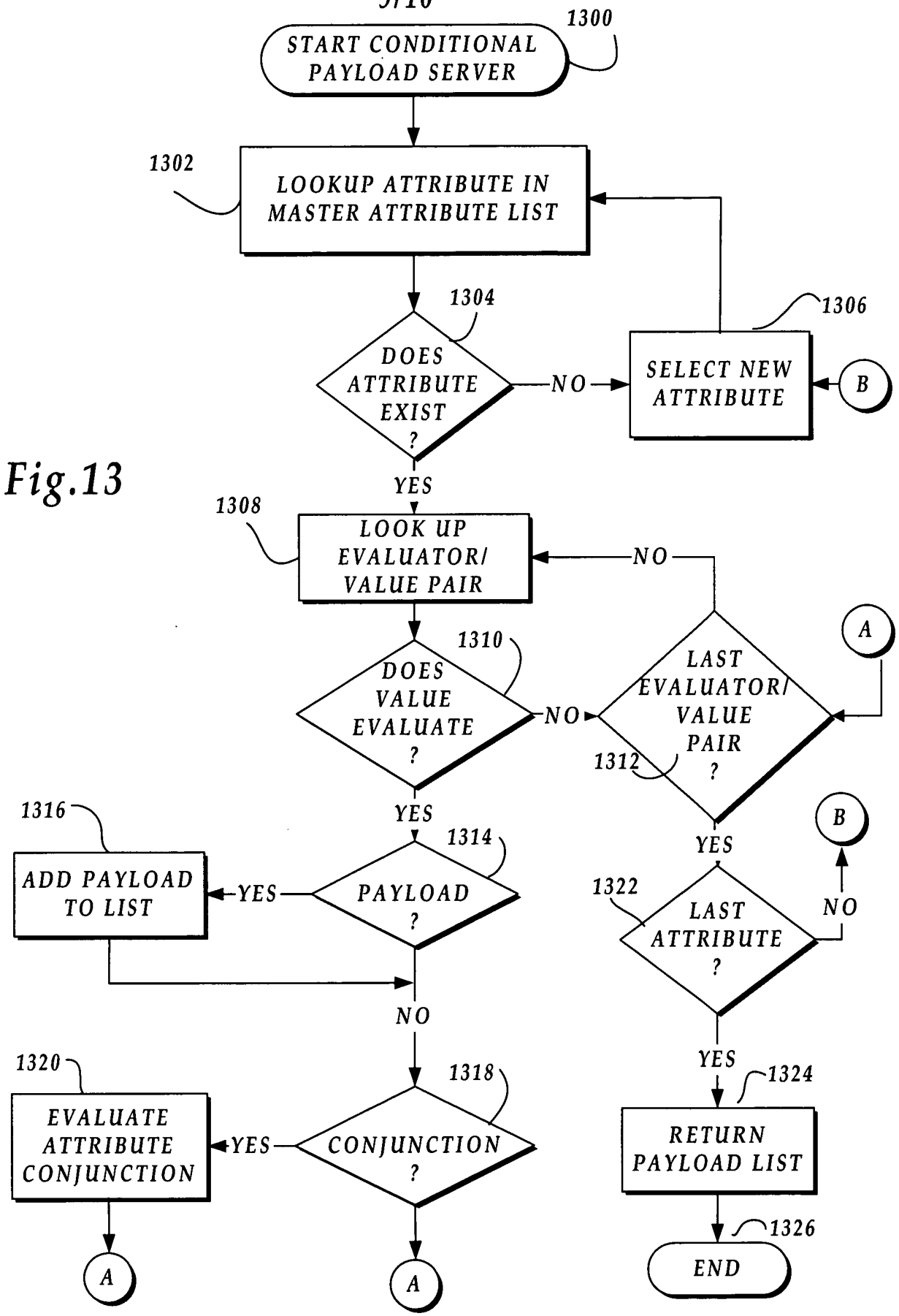

Fig.13

09682950 052702

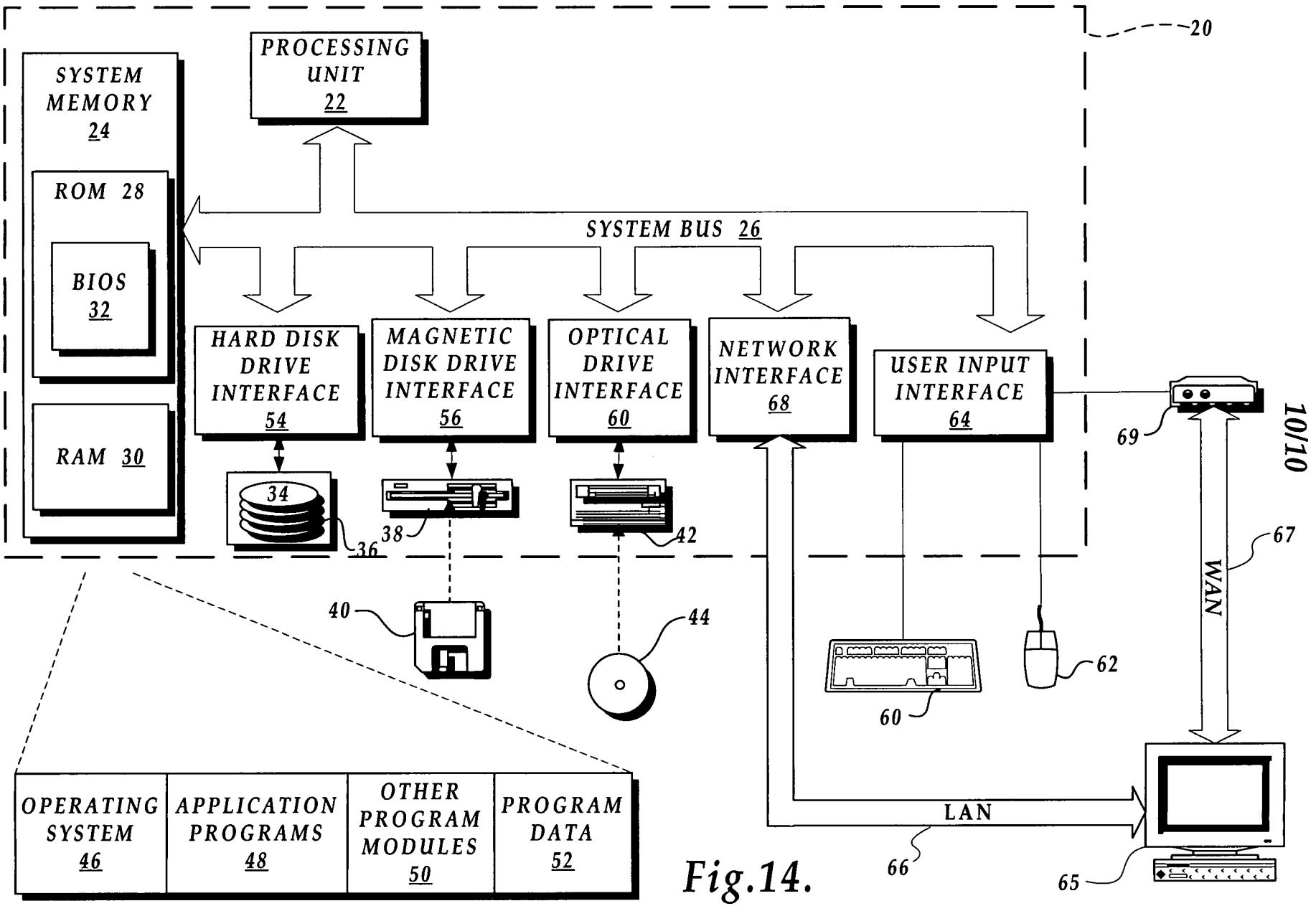
20
PROCESSING UNIT 22
SYSTEM MEMORY 24
ROM 28
BIOS 32
RAM 30
SYSTEM BUS 26
HARD DISK DRIVE INTERFACE 54
MAGNETIC DISK DRIVE INTERFACE 56
OPTICAL DRIVE INTERFACE 60
NETWORK INTERFACE 68
USER INPUT INTERFACE 64
34
36
38
40
42
44
60
62
69
67
WAN
LAN
66
65
OPERATING SYSTEM 46
APPLICATION PROGRAMS 48
OTHER PROGRAM MODULES 50
PROGRAM DATA 52

Fig.14.